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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,829	04/03/2001	Christian Prehofer	P00,2004	4617
7590	05/31/2005		EXAMINER	
Brett C. Martin 1650 Tysons Boulevard McLean, VA 22102			SHAH, CHIRAG G	
			ART UNIT	PAPER NUMBER
			2664	

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/744,829	PREHOFFER, CHRISTIAN	
	Examiner	Art Unit	
	Chirag G. Shah	2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-20 is/are rejected.
- 7) ☒ Claim(s) 21-24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/30/01 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 23 objected to because of the following informalities: Claim 23, line 2, has a spelling error. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 13-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Riggan et al., hereinafter, Riggan (U.S. Patent No. 6,490,252) in view of Farris et al., hereinafter, Farris (U.S. Patent No. 6,574,216).

Referring to claim 13, Riggan discloses in 2, 3A, 3b, 4-6 of a method for re-routing data packets of a packet-switching network [ATM Network 305 of figure 2] into at least one alternate network [X.25, PSTN, an ISDN, a cable broad cast television , wireless network or a frame relay network as disclosed in column 4, lines 5-34] capable of assuring a quality [QoS] requested by a network user, the packet-switching network [ATM Network} and the at least one alternate network [X.25, PSTN, an ISDN, a cable broad cast television , wireless network or a frame relay network as disclosed in column 4, lines 5-34] form sub-networks of a network over which data packets can be transmitted, including at least source node [user interface 308 is thus coupled to

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receive data streams at input ports 310 via input lines 311 connected to source as in figure 3b] and at least one destination node [node B] that are each respectively one of either directly or indirectly connected to an access node 300a, the access node being capable of setting up a connection both to the packet switching network [ATM Network] and to one of the at least one alternate network[X.25, PSTN, ISDN, cable, wireless or frame relay network], the method comprising:

Identifying only by a respective bit pattern [traffic type, such as voice, video or data] known to the access node [300a] the data packets to be routed via an alternate network in the source node [input lines 311 connected to source as in figure 3b] by a bit pattern known [traffic type] to the access node [300a] that is connected to the source node either directly or indirectly via at least one intermediate node [as disclosed in abstract, figure 2, column 4, lines 6 to column 5, lines 24, if the signal from the NMS indicates that the QoS threshold is exceeded, then at least a first portion of the data, e.g., excess cells, are routed to node 300b via one or more of the secondary networks 212a-212c. The particular secondary network is chosen based upon the type of data, which is to be transmitted. More particularly, the voice, data and video streams may be classified according to the adaptation layer type. The traffic then directed to a secondary network, which is capable of handling traffic of the corresponding type];

Recognizing the known bit pattern [traffic type, voice, video or data] upon arrival of such data packets in the access node [as disclosed in the abstract, figure 2 and in column 4, lines 6 to 67, A plurality of user data streams are received into node 300a, functions as the access node, the user data streams may comprise data, voice or video

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traffic in various synchronous and asynchronous formats. Node 300a identifies the type of traffic received and receives a signal from the NMS indicating whether or not the QoS threshold has been reached, if the traffic level is below the threshold, the node 300a adapts the received traffic into the ATM cells, establishes the appropriate virtual paths and connections, and transfers the cells to node via ATM network 305]; and

Re-routing the data packets identified with only the known bit pattern onto an alternate network [as disclosed in the abstract, figure 2 and in column 4, lines 6 to column 5, lines 24, if the signal from the NMS indicates that the QoS threshold is exceeded, then the received/known traffic type cells are routed to node 300b via one or more of the network networks 212a-212c].

Riggan discloses in figure 2 of a topology layout where the access node 300a serves as the source node and access node 300b serves as the destination node. Riggan explicitly fails to explicitly disclose the topology layout including at least source node and at least one destination node that are each respectively one of either directly or indirectly connected to an access node via at least one intermediate node, the access node being capable of setting up a connection both to the packet switching network and to one of the at least one alternate network. Farris discloses in the abstract, figure 3 and respective portions of the specification of a source device 90 connected to SSP13 functioning as an access node capable of setting up a connection both to the packet switching network 50 and to one of the at least alternative network 10. Therefore, it would have been obvious to one of ordinary skills in the art to modify the topology of Riggan to include the separation of source and access node as disclosed in Farris in order

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to illustrate several design options or topology modification without departing from the function of the invention wherein the access node/SSP is capable of setting up connections to both packet switching and an alternate network in order to provide high QoS for various traffic types.

Referring to claim 14, Riggan discloses of further comprising the step of using a filter in the access node to check data packets arriving from a source node for the known bit pattern; and initiating the re-routing of the data packets identified with this bit pattern onto an alternate network when a known bit pattern is recognized [see figure 2, 3a,3b and in column 4, lines 6 to column 5, lines 24, incoming traffic, voice, video and data is classified as AAL Type 1, 2,3 / 4 , 5 traffic and the secondary network is chosen by the access node 300a based upon the traffic type of data which is to be transmitted] as claim.

Referring to claim 15, Riggan discloses of further comprising the step of connecting to the source node of either directly or indirectly via at least one intermediate node containing a table for determining traffic path into which the function of the filter is integrated, the table additionally contains bit pattern that can produce a re-routing of the data packet identified with such bit patterns onto an alternate network [as disclosed in figure 2 and column 5, lines 1-42, a controller in node 300a, monitors the source and type of traffic that can produce a re-routing of the data packet identified into an alternate network] as claim.

Referring to claim 16, Riggan discloses of further comprising the step of locating the known bit pattern [traffic type] in the header [5 bytes] of a data packet to be routed via the alternate network [see in figures 1, 6, column 6, lines 17-31, and column 7, lines 5-38] as claim.

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Referring to claim 17, Riggan discloses of comprising the step of using the same bit pattern in at least one source node regardless of the respectively request quality [see column 5, lines 1-42, regardless of the request quality, each AAL Traffic Type is routed back through the ATM network, once the bandwidth utilization of the ATM network falls below the predetermined threshold] as claim.

Referring to claim 18, Riggan discloses of further comprising the step of using in at least one source node, bit patterns corresponding to the respectively requested quality [see column 5, lines 1-42, each AAL Traffic Type is routed to a corresponding respective alternate network as long as the quality condition is met] as claim.

Referring to claim 19, Riggan discloses of further comprising the step of using bit pattern of a data packet to produce a re-routing thereof onto at least one alternate network corresponding to the bit pattern with a specific quality [see column 5, lines 1-42, each specific AAL Traffic Type is routed to a corresponding respective alternate network as long as the quality condition is met] as claim.

Referring to claim 20, Riggan discloses further comprising the step of using each recognized bit pattern of a data packet to produce a re-routing thereof onto at least one alternate network with a quality corresponding to the recognized bit pattern [see column 5, lines 1-42, each specific AAL Traffic Type is routed to a corresponding respective alternate network as long as the quality condition is met] as claim.

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Allowable Subject Matter

4. Claims 21-24 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments filed 12/16/04 have been fully considered but they are not persuasive.

Applicant argues with respect to claim 13 that Riggan et al. do not disclose re-routing based only on bit pattern and Riggan et al necessarily require other steps or actions in order to router packets via an alternate pathway, and Farris et al do not overcome this deficiency. Examiner respectfully disagrees and redirects Applicant to Riggan et al reference. Riggan et al clearly discloses in col. 4, lines 48-67 that a bit pattern is identified by the traffic type, such as voice, video or data, which is known to the access node 300a. The access node based on the known bit pattern and associated signal indicating QoS threshold exceeding information received from the NMS determines if the cells are to be routed to an alternate network. A bit pattern as defined by the specification is found in the TOS bytes, the traffic type such a voice, video or data in connection with received associated signal from the NMS enables the access node 300a to clearly determine re-routing of the data packets onto an alternate network. The access node 300a recognizes the known traffic type along with its associated signal, which enables re-routing of the data packets. Riggan et al clearly states in col. 4, lines

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60-64 that the particular secondary network is chosen based on the type of data (voice, video or data bit pattern), which is to be transmitted. Therefore, the access node 300a based on known bit pattern (voice, video or data bit pattern) determines the particular secondary network to be chosen for rerouting the packets to an alternate network. Thus, claim 13 respectfully remains rejected.

Applicant further argues with respect to claim 21, that neither Riggan et al nor Farris et al describe preventing a data packet to be routed to the alternate network in the first place if the alternate network cannot offer a quality corresponding to a bit pattern associated with the data packet. Applicant's arguments see page 3, lines 9-18, filed 12/16/04, with respect to 21 have been fully considered and are persuasive. The rejection of 21 has been withdrawn.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any response to this final action should be mailed to:

Box AF

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Or faxed to:

(703)305-9051, (for formal communications; please mark "EXPEDITED
PROCEDURE)

Or:

(703)305-5403 (for informal or draft communications, please label "PROPOSED"
or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal
Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Chirag G. Shah whose telephone number is 571-272-3144. The
examiner can normally be reached on M-F 6:45 to 4:15, 2nd Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the
organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cgs
May 17, 2005


Ajit Patel
Primary Examiner